

STATE OF MARYLAND

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Maryland Department of Health and Mental Hygiene

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July 22, 2009

Public Health & Emergency Preparedness Bulletin: # 2009:28 Reporting for the week ending 07/18/09 (MMWR Week #28)

CURRENT HOMELAND SECURITY THREAT LEVELS

National: Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)

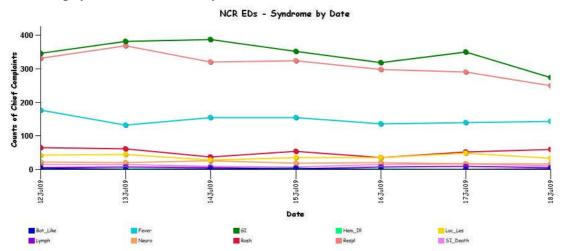
Maryland: Yellow (ELEVATED)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

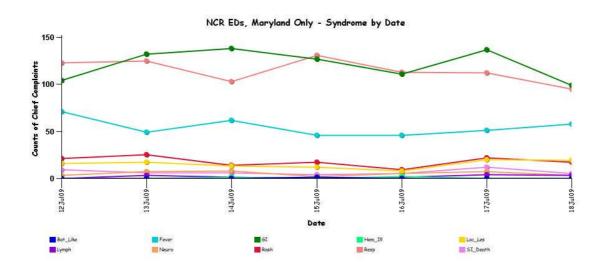
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

**Data for graph of NCR EDs is not complete due to technical issues.

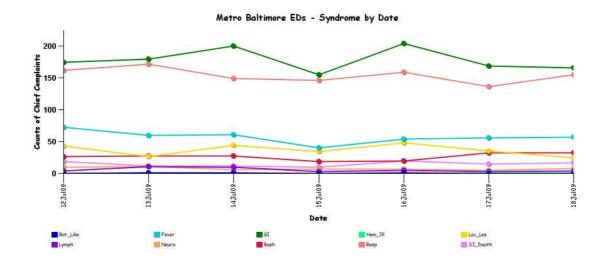


 $^{^{}st}$ Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system.

**Data for graph of NCR EDs, Maryland Only is not complete due to technical issues.



* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system.

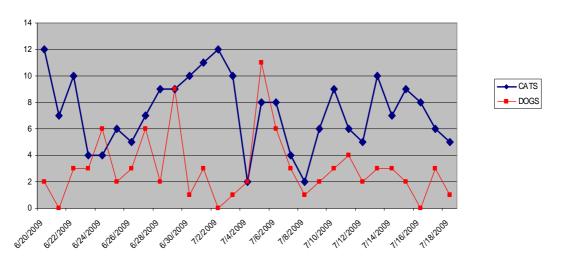


^{*} Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

^{**} Red Alerts are not indicated on this graph.

BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT: No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.

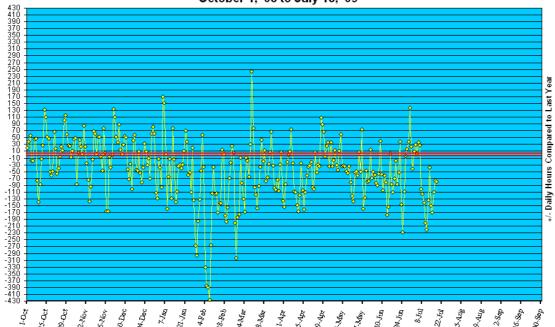
Dead Animal Pick-Up Calls to 311



REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/08.

Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '08 to July 18, '09



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to BT for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in June 2009 did not identify any cases of possible terrorism events.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	<u>Aseptic</u>	<u>Meningococcal</u>
New cases (July 12 – July 18, 2009):	16	0
Prior week (July 05 – July 11, 2009):	25	0
Week#28, 2008 (July 05 – July 11, 2008):	15	0

OUTBREAKS: 5 outbreaks were reported to DHMH during MMWR Week 28 (July 12- July 18, 2009):

1 Gastroenteritis outbreak

1 outbreak of GASTROENTERITIS associated with a Nursing Home

1 Foodborne Gastroenteritis outbreak

1 outbreak of FOODBORNE GASTROENTERITIS associated with a Private Event

3 Respiratory illness outbreaks

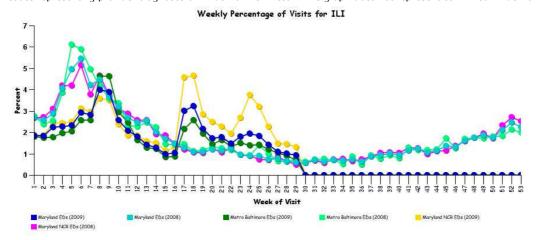
1 outbreak of INFLUENZA associated with a Camp

2 outbreaks of ILI associated with Camps

MARYLAND INFLUENZA STATUS: Influenza activity in Maryland for Week 28 is WIDESPREAD.

SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graph shows the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. This graph does not represent confirmed influenza.



^{*}Graph shows proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.

PANDEMIC INFLUENZA UPDATE:

WHO Pandemic Influenza Phase: Phase 6: Characterized by community level outbreaks in at least one other country in a different WHO region in addition to the criteria defined in Phase 5. Designation of this phase will indicate that a global pandemic is under way. Definition of Phase 5 is characterized by human-to-human spread of the virus into at least two countries in one WHO region. While most countries will not be affected at this stage, the declaration of Phase 5 is a strong signal that a pandemic is imminent and that the time to finalize the organization, communication, and implementation of the planned mitigation measures is short.

US Pandemic Influenza Stage: Stage 0: New domestic animal outbreak in at-risk country

**More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at: http://bioterrorism.dhmh.state.md.us/flu.htm

AVIAN INFLUENZA-RELATED REPORTS:

WHO update: As of July 01, 2009, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 436, of which 262 have been fatal. Thus, the case fatality rate for human H5N1 is about 60%.

H1N1 INFLUENZA (Swine Flu):

INFLUENZA PANDEMIC (H1N1), SWINE (Argentina): 17 Jul 2009, The government declared a nationwide animal health emergency following the discovery of the new H1N1 flu virus in at least one pig herd. The flu strain has killed 137 people in the South American country during the Southern Hemisphere winter and the government has closed schools and urged Argentines to avoid crowded places to halt its spread. "The contingency plan ... allows for an increase in testing in pig farms and in slaughter houses in order to guarantee early detection," the government's Official Gazette said. The emergency measure, which will also give officials extra funding to deal with the outbreak, was drawn up by the staterun SENASA agency, responsible for animal health and food safety. Earlier this month, SENASA officials said workers at a pig farm in Buenos Aires province were suspected of having passed the new strain onto the animals. That added weight to the theory that pigs can be infected by humans. Another pig herd later tested positive for the virus although Friday's statement only made mention of the 1st case.

INFLUENZA PANDEMIC (H1N1), CASE REPORTING (Worldwide): 16 Jul 2009, Countries should change the way they track the spread of swine flu, the World Health Organization (WHO) said 16 Jul 2009, noting that it no longer serves any useful purpose to count individual confirmed cases. That type of resource-intensive surveillance isn't needed in places where outbreaks are already established and the work required for case-by-case counting is not sustainable, the Genevabased agency said in a statement. Instead the WHO asked countries to look for signs of "unusual events" - indicators that might suggest alterations in patterns of disease severity or spread that might be signs of changes in the pandemic virus. "The increasing number of cases in many countries with sustained community transmission is making it extremely difficult, if not impossible, for countries to try and confirm them through laboratory testing," the WHO said. "Moreover, the counting of individual cases is now no longer essential in such countries for monitoring either the level or nature of the risk posed by the pandemic virus or to guide implementation of the most appropriate response measures." The WHO said countries that haven't yet seen cases or are in the early days of their outbreaks are still being asked to report weekly estimates of case numbers and a description of the disease pattern being seen. Countries with established outbreaks should still keep a sharp eye out for unusual events, the WHO said, pointing to things like clusters of cases of severe or fatal infection or of respiratory illness requiring hospitalization, or unexplained or unexpected clinical patterns associated with serious or fatal cases. Other potential signals the virus may be changing include "unexpected, unusual or notable changes in patterns of transmission," spikes in absenteeism from schools or workplaces or surges in emergency department visits.

INFLUENZA PANDEMIC (H1N1), VACCINE (Worldwide): 13 Jul 2009, On 7 Jul 2009, the Strategic Advisory Group of Experts (SAGE) on Immunization held an extraordinary meeting in Geneva to discuss issues and make recommendations related to vaccine for the pandemic (H1N1) 2009. SAGE reviewed the current pandemic situation, the current status of seasonal vaccine production and potential A (H1N1) vaccine production capacity, and considered potential options for vaccine use. The experts identified 3 different objectives that countries could adopt as part of their pandemic vaccination strategy: (1) protect the integrity of the health-care system and the country's critical infrastructure; (2) reduce morbidity and mortality; and (3) reduce transmission of the pandemic virus within communities. Countries could use a variety of vaccine deployment strategies to reach these objectives, but any strategy should reflect the country's epidemiological situation, resources and ability to access vaccine, to implement vaccination campaigns in the targeted groups, and to use other non-vaccine mitigation measures. Although the severity of the pandemic is currently considered to be moderate, with most patients experiencing uncomplicated, self-limited illness, some groups such as pregnant women and persons with asthma and other chronic conditions such as morbid obesity appear to be at increased risk for severe disease and death from infection. Since the spread of the pandemic virus is considered unstoppable, vaccine will be needed in all countries. SAGE emphasized the importance of striving to achieve equity among countries to access vaccines developed in response to the pandemic (H1N1) 2009. SAGE was established by the WHO Director-General in 1999 as the principal advisory group to WHO for vaccines and immunization.

Resources:

http://www.cdc.gov/h1n1flu/

http://www.dhmh.maryland.gov/swineflu/

NATIONAL DISEASE REPORTS

PLAGUE, FATAL (New Mexico): 15 Jul 2009, A 16-month-old Bernalillo County girl is recovering from plague, the county's 1st human case this year and the state's 5th, according to the Albuquerque Vector-Borne and Zoonotic Disease Division. The city officials said the girl was likely exposed to the plague in the East Mountains, and investigators are gathering more information on how she was exposed. Officials also believe the girl's great-grandfather was also infected with plague, but they're still awaiting final test results. Family pets are also prone to the plague and could carry infected fleas home to their owners. Dogs may not show symptoms, the city said, but cats may develop swollen lymph nodes in the neck, become lethargic, suffer a fever or lose their appetite. Officials suggest that pet owners use flea control on their pets, keep them away from dead rodents or rodent burrows, and prevent them from roaming or hunting. They should also take sick pets to a veterinarian. People should also avoid sick or dead rodents, keep their distance from wildlife and prevent rodents from living near their homes by removing trash and weeds and getting wood piles off the ground. (Plague is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

PLAGUE, TULAREMIA, PRAIRIE DOGS (South Dakota): 12 Jul 2009, Officials have confirmed the presence of sylvatic plague and tularemia in Badlands National Park. That's bad news for the park's prairie dogs and black-footed ferrets, but visitors should be OK if they use common sense safety precautions. Sylvatic plague, which was 1st detected in South Dakota in 2004, turned up last year in the prairie dog population of the Conata Basin just south of Badlands National Park. Since fleas spread plague from infected animals to healthy ones (and occasionally to humans as well), officials ordered a flea suppression campaign that entailed applying insecticides to prairie dog colonies over an area of about 11,000 acres. In addition, black-footed ferrets were captured and given plaque vaccinations. It was fervently hoped that these measures would keep the disease from spreading to Badlands National Park, which not only harbors many thousands of prairie dogs but also a small and struggling population of endangered black-footed ferrets that mainly feed on prairie dogs. Alas, about a week ago, wildlife biologists confirmed that the prairie dog population in the Sage Creek Wilderness Area of the park is being assaulted by sylvatic plague. Tularemia (rabbit fever) has also been detected in one of the park's prairie dog colonies. Both diseases sicken and kill prairie dogs, so this disease outbreak has the potential to decimate the park's prairie dog population and perhaps undo much of the effort that's been invested in reestablishing black-footed ferrets there. Although few people in the U.S. have ever been infected by plague or tularemia, both diseases can be transmitted to humans and should be considered potentially dangerous. Park officials are advising visitors to take common sense safety precautions to minimize the likelihood of infection. (Plague is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS

SALMONELLOSIS, SEROTYPE ENTERITIDIS, MAYONNAISE (Bulgaria): 14 Jul 2009, The microbiological laboratory in Pazardzhik has confirmed that the cause of the illness that affected 22 people in the town of Pazardzhik from an Arab-run schwarma fast food outlet is attributed to Salmonella enterica serotype enteritidis. Initially, 19 people were admitted to the emergency ward, followed by another 3, including a 3-year-old child. "Salmonella enteritidis is the cause of contamination," said Dr. Fany Petkova. "The source of the problem is the Ali Baba fast food outlet in Pazardzhik. Of the 22 affected, 11 have already been released, whereas the condition of the people who remain hospitalized is stable," she said. Data from the final analysis released by the laboratory in Pazardzhik say that "Salmonella, from the eggs with which mayonnaise sauce was made for the diners, caused food poisoning." The outlet has been closed until further notice. It was revealed that the enterprise had been checked 4 times since the beginning of 2009. During the last investigation, conducted on 12 Jul 2009, a document was signed obliging the owner to "improve the hygiene" as it was considered to be "inadequate." In the previous examination, performed in March 2009, the owner was told to use only "egg powder for the mayonnaise," which he failed to comply with. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

BOVINE BRUCELLOSIS, POSITIVE SEROLOGY (Fiji): 16 Jul 2009, The Ministry of Agriculture has confirmed that 4 farms in the West have now tested positive for Brucellosis. Initial tests showed the outbreak confined to Wainivesi and Waimaro in Tailevu. 4000 cattle have been tested with 314 being culled - but now a brucellosis outbreak has been detected in the Western Division. The farms that have recorded cases of the disease are from Nadi, Sigatoka, and Tavua - with test results for Rakiraki still pending. Agriculture ministry official Josefa Uluilakeba says while the source of the outbreak is still being investigated, it's possible that the infection emanated out of Tailevu. He says counter measures are now underway to ensure that this time the bacterial infection is eradicated once and for all. (Brucellosis is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://bioterrorism.dhmh.state.md.us/

Maryland's Resident Influenza Tracking System: www.tinyurl.com/flu-enroll

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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